OBLON, SPIVAK, MCCLELLAND MAJER & NEUSTADT, P.C.

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS

P O Box 1450 Alexandria, Virgima 22313-1450 www.uspto.gov

NOTICE OF ALLOWANCE AND FEE(S) DUE

22850 7590 02/03/2009

EXAMINER
HANNAHER, CONSTANTINE

1940 DUKE STREET ALEXANDRIA, VA 22314 ART UNIT PAPER NUMBER

2884

DATE MAILED: 02/03/2009

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/585,649	07/07/2006	Karl Wilhelm Kramer	292811US0X PCT	5483

TITLE OF INVENTION: BRIGHT AND FAST NEUTRON SCINTILLATORS

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	05/04/2009

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FFE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address and indicated unless corrected below of directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or either "FEE ADDRESS" for

Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE Commissioner for Patents F.O. Box 1450

Alexandria, Virginia 22313-1450 or Fax (571)-273-2885

maintenance fee notifications Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address) papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission. 22850 7590 02/03/2009 Certificate of Mailing or Transmission OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C.1 hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sulficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FIE address above, or being facsimile transmitted to the USPIO (\$71) 273-2885, on the date indicated below. 1940 DUKE STREET ALEXANDRIA, VA 22314 (Depositor's name (Signature APPLICATION NO. FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO. CONFIRMATION NO 10/585.649 07/07/2006 Karl Wilhelm Kramer 292811US0X PCT 5483 TITLE OF INVENTION: BRIGHT AND FAST NEUTRON SCINTILLATORS APPLN, TYPE SMALL ENTITY ISSUE FEE DUE PUBLICATION FEE DUE PREV. PAID ISSUE FEE TOTAL FEE(S) DUE DATE DUE nonprovisional NO \$1510 \$300 \$0 \$1810 05/04/2009 EXAMINER ART UNIT CLASS-SUBCLASS

L'ER 1.50.7.

Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.

The Address findication for "Fee Address" indication form PTO/SB/47, Rev 03-02 or more recent) attached. Use of a Customer Number is required.

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250-390110

2. For printing on the patent front page, list

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignce is identified below, no assignce data will appear on the patent. If an assignce is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE (B) RESIDENCE: (CITY and STATE OR COUNTRY)

2884

Please check the appropriate assignee category or categories (will not be printed on the patent): Individual Corporation or other private group entity Government

4a. The following fee(s) are submitted:
| Issue Fee
| Publication Fee (No small entity discount permitted)
| Advance Order - # of Copies
| Advance Order - # of Copies
| Only Advance Order - # of Copies | Only Advance Order - # of Copies | Only Advance Order - # of Copies | Only Advance Order - # of Copies | Only Advance Order - # of Copies | Only Advance Order - # of Copies | Only Advance Order - # of Copies | Only Advance Order - # of Copies | Only Advance Order - # of Copies | Only Advance Order - # of Copies | Only Advance Order - # of Copies | Only Advance Order - # of Copies | Only Advance Order - # of Copies | Only Advance Order - # of Copies | Only Advance Order - # of Copies | Only Advance Order - # of Copies | Only Advance Order - # of Copies | Only Advance Order - # of Copies | Only Advance Order - # of Copies | Only Advance Order - # of Copies | Only Advance Order - # of Copies | Only Advance Order - # of Copies | Only Advance Order - # of Copies | Only Advance Order - # of Copies | Only Advance Order - # of Copies | Only Advance Order - # of Copies | Only Advance Order - # of Copies | Only Advance Order - # of Copies | Only Advance Order - # of Copies | Only Advance Order - # of Copies | Only Advance Order - # of Copies | Only Advance Order - # of Copies | Only Advance Order - # of Copies | Only Advance Order - # of Copies | Only Advance Order - # of Copies | Only Advance Order - # of Copies | Only Advance Order - # of Copies | Only Advance Order - # of Copies | Only Advance Order - # of Copies | Only Advance Order - # of Copies | Only Advance Order - # of Copies | Only Advance Order - # of Copies | Only Advance Order - # of Copies | Only Advance Order - # of Copies | Only Advance Order - # of Copies | Only Advance Order - # of Copies | Only Advance Order - # of Copies | Only Advance Order - # of Copies | Only Advance Order - # of Copies |

Change in Entity Status (from status indicated above)

a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27.

b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2)

NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignce or other party in interest as shown by the records of the United States Patent and Trademark Office.

Authorized Signature ______ Date _____

Typed or printed name. Registration No. This collection of information is required by 37 CFR. L311. The information is required to obtain or retain a breast fit by the roblle; which is to file (and by the USFTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR. 1.4 This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USFTO. Time will vary depending upon the individual case. Any comments on amount of time your enguire to complete this form and/or suggestions for reducing this brudes about the sent to the Chef Information Offices. U.S. Patiens and Trademat Office. U.S. Patiens and Calentary of the Computer of Commerce, P.O. Alexandria, Virginal 2311.1843.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

HANNAHER, CONSTANTINE

 Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).



UNITED STATES PATENT AND TRADEMARK OFFICE

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10/585,649	07/07/2006	Karl Wilhelm Kramer	292811US0X PCT	5483		
22850 7	22850 7590 02/03/2009			EXAMINER		
OBLON, SPIVA	K, MCCLELLAND	HANNAHER, CONSTANTINE				
1940 DUKE STREET			ART UNIT	PAPER NUMBER		
ALEXANDRIA, '	VA 22314	2884				

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 48 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 48 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

Notice of Allowability

Application No.	Applicant(s)	
10/585,649	KRAMER ET AL.	
Examiner	Art Unit	
Constantina Hannahar	2884	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308. This communication is responsive to submissions of 21 January 2009. 2. The allowed claim(s) is/are 1-20. 3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) \square All b) ☐ Some* c) ☐ None of the: 1. T Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. __ 3. Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)). * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

 A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

CORRECTED DRAWINGS (as "replacement sheets") must be submitted.

(a) Including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached 1) hereto or 2) to Paper No./Mail Date

(b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6.

DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

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1.	Пι	Votice	of	Ref	erei	nce

s Cited (PTO-892)

Notice of Draftperson's Patent Drawing Review (PTO-948)

 Information Disclosure Statements (PTO/SB/08). Paper No./Mail Date

4. T Examiner's Comment Regarding Requirement for Deposit of Biological Material

5. Notice of Informal Patent Application

Interview Summary (PTO-413), Paper No./Mail Date

7.

Examiner's Amendment/Comment

Examiner's Statement of Reasons for Allowance

Other Examiner's Comment.

ATTACHMENT(S)

Comment on Submission(s)

The amendment filed January 21, 2009 has been entered.

Conclusion

- 2. A declaration is an application paper, 37 CFR 1.52(b). 37 CFR 1.52(a)(1)(iv) requires all application papers to be legibly written either by a typewriter or machine printer. The reasons the Office amended 37 CFR 1.52(a) to include this requirement are directly applicable to the identification required by 37 CFR 1.63(a)(2) and 37 CFR 1.63(a)(3). The Office seeks sufficient clarity and contrast between the paper and the writing thereon to permit electronic reproduction by use of digital imaging and optical character recognition. Applications containing hand-written papers create an inordinate administrative burden on the Office during the initial processing, examination, and publishing of the application as a patent. Therefore, the Office no longer permits applicants to submit application papers that do not meet the standards set forth in the rules. See 61 Federal Register 161 of 19 August 1996, page 42793.
- 3. The opportunity to date and initial alterations afforded by 37 CFR 1.52(c)(1) does not override the requirement for the use of a typewriter or machine printer of 37 CFR 1.52(a)(1)(iv).

 The argument that the handwriting on any document submitted in this application is permitted is not warranted on the evidence that the revision in 1996 to 37 CFR 1.52 exchanged "must be legibly written, typed, or printed in permanent ink or its equivalent in quality" for "must be legibly written by typewriter or mechanical printer in permanent dark ink or its equivalent..." and that the equivalence intended was to permit the filing of papers printed by any computer operated printer, such as a laser printer which uses toner rather than ink, and to avoid a conflict between 1.52(a) and

Patent Cooperation Treaty (PCT) Rule 11.9². See the Federal Register notice identified in the previous paragraph.

4. To the extent that twelve years after the rules changed (to deny the ability to write application papers) and the procedures of the firm became obsolete, applicant's representative would rather argue than comply with the relevant rule set forth explicitly in the objection, the Examiner makes no further requirement.

Conclusion

 Any inquiry concerning this communication or earlier communications from the examiner should be directed to Constantine Hannaher whose telephone number is (571) 272-2437. The examiner can normally be reached on Monday-Friday with flexible hours.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David P. Porta can be reached on (571) 272-2444. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

¹ Indeed, 37 CFR 1.52(c)(1) ends with the requirement for a substitute specification if the application papers after any interlineation, erasure, cancellation, or other alteration "do not comply with paragraphs (a) and (b) of this section."

/Constantine Hannaher/ Primary Examiner, Art Unit 2884

² PCT Rule 11.9(a) then required and still requires that the "request, the description, the claims and the abstract shall be typed or printed" with only the exceptions listed in 11.9(b).